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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/208,962

12/10/1998

RICHARD A. ELCO

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8858

7590

03/24/2004

BRIAN J HAMILLA INTELLECTUAL PROPERTY
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EXAMINER

ABRAMS, NEIL

ART UNIT

PAPER NUMBER

2839

DATE MAILED: 03/24/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

lm

Office Action Summary	Application No.	Applicant(s)	
	09/208,962	ELCO ET AL.	
	Examiner	Art Unit	
	Neil Abrams	2839	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _____ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 9-10-03 (RCE)
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 46-64 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 46-64 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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The request for continued examination (RCE) transmittal is acknowledged. A first action follows.

The rejections of claims 46-64 under 35 USC 112 and related discussion in two last office actions are repeated and incorporated into this letter.

In addition as stated in the *last office action* figs. 1, 2, 3 disclosures, to which these claims are believed to be directed are to be used in practice is unclear. In the response applicant in explaining the invention only refers to fig. 1. The examiner also notes that features shown in Fig. 1-3 do not clearly relate to Figs. 4-33 disclosures and these do not aid in understanding the figs. 1-3 embodiments. For figs. 1-3 devices just how current is applied and signals transmitted is unclear. For claims 48-54, no teaching of figs. 1-3 device with "solder masses" is present. How claim 48 reads on any figure in the case should be explained. For claims 46, 54, 56, the disclosure is also lacking for failure to show the parts arranged in the manner now seen to be intended, as shown in last response, see figure on page 3. A figure like this was not present in the case as filed. Should the rejections under 35 USC 112 be overcome, such added figures would be required since all claimed features must be shown. For side-by-side limitations, sole support is spec. Page 6, lines 1-3. This is not adequate for detailed claims now presented. Also claim 46 line 4, terms, "laterally spaced" lacks basis in disclosure as filed. This also applies to claims 51, 56. Note that in the page 3 figure the ground planes on right are not shown as laterally spaced from those on left.

The claims, as best understood are rejected below on prior art.

In addition as stated in the advisory action a fig. Like that in Remarks, page 3 is still considered to be necessary to show separate conductors 26, 28 not shown in figs. 19, 20. Also claim 46, line 12 reads "a dielectric having...thickness" but just what this refers to is unclear.

Applicant in response should ~~show~~^{and} refer to certain figs. ~~And~~ point out just how claims 46, 48 and 61 features are readable on such figs. Claims 46, 48 features discussed above.

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the claims 46, 48 features discussed above must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim ~~10~~⁶¹ is rejected under 35 USC 102(b) as anticipated by or in the alternative under 35 USC 103(a) as obvious over Fedder.

For claim 61 the Fedder connector 12 (fig. 11) includes signal conductors 56 and ground planes 60 on each side of the signal conductors. ~~See attached sketch.~~ A virtual ground plane is not disclosed but it seems clear that one or more would exist between conductors 56 or to the sides of the housing. Alternatively it would have been obvious to design the connectors to have such ground planes since they only involve spacing the contacts far apart enough so as to prevent magnetic coupling between the contacts.

Nor does the claim define over such virtual plane at or outwardly of the housing sides walls. If crosswalk between contacts were present it would have been obvious to space them further apart and this would result in a ground plane or plane of zero charge between contacts. The reference is also applied with connectors mated and with combined ground planes 60, 110 separating the contacts.

Claims 46, 47, 51, 52, 56, 57 are rejected under 35 USC (a) as being unpatentable over Fedder in view of Goodman.


The above discussion of Fedder is applied in this rejection. It is well known to mount connectors side by side on a circuit board as shown by Goodman. It would have been obvious to so locate a pair of Fedder connectors 12. This enables many signals to be fed to the motherboard. The connectors so mounted would have laterally spaced apart ground planes 60 or 60, 110 and a virtual ground plane would exist between the connectors or to the side of some of the contacts 56. This arrangement would meet claim language.

Claims 48-50, 53-55, 58-60 and 62-64 are rejected under 35 USC 103(a) as being unpatentable over Fedder in view of Seidler, Swamy and Romine and Goodman.

Fedder does not solder mass use. Seidler Swamy and Romine disclose contacts with attached solder masses or balls. It would have been obvious to form Fedder contacts for surface mount with attached solder masses in view of these references. This would enable easier mounting to the pcb. Goodman applied as above. Arguments are responded to in above discussions.

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Any inquiry concerning this communication should be directed to Abrams Neil at telephone number (571)272-2089.


NEIL ABRAMS
EXAMINER
ART UNIT 322